



## Aerial Detection Survey, Pacific Southwest Region Northwestern California, March 2019

**Objective:** The objective of this survey is to detect and record recently dead and damaged trees. Most of the mortality and damage is caused by insects and diseases.

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**Methodology:** Recent tree mortality is visually surveyed and documented using Digital Mobile Sketch Mapping (DMSM) systems. Surveyors draw polygons or affix points and annotate percent of forest area affected along with damage type, tree species, and causal agent. The five-class rating system is: Very Light (1-3%), Light (4-10%), Moderate (11-30%), Severe (31-50%), and Very Severe (>50%).

## **Survey Highlights:**

This report summarizes preliminary findings in and around Six Rivers and Mendocino National Forests, Redwood National Park, Redwood and several other State Parks, and surrounding areas.

- Tanoak mortality increased from 15,455 acres with mortality in 2017 to 86,812 acres in 2018, concentrated west
  of the costal range. While SOD symptoms were observed over much of this area, follow-up field reconnaissance is
  needed to determine extent.
- The majority of California red and white fir mortality was observed along the coastal range within the Six Rivers and Mendocino National Forests
- 107,053 acres with mortality of pole-sized Douglas-fir and Redwood attributed to bear feeding damage was recorded mostly west of Six Rivers National Forest in industrial owned forest lands.
- Douglas-fir mortality of larger trees not attributable to bear feeding damage was concentrated north of Eel River drainage on the west side of the coastal range.
- Other mortality was relatively minor and included bishop pine, redwood, grey pine, pacific madrone, and live oak.

Tree Species Affected	Acres with Mortality
Tanoak	86,812
White fir	57,924
Douglas fir	23,625
Other tree species	12,322
Ponderosa pine	10,835
Other tree species	6,493
Total	198,011

**Preliminary Summary** 

Area surveyed: 9.1 million acres

Acres with mortality: 198,011 acres

(numbers may change)



Tree mortality from 2015 Route Complex fire mixed with scattered more recent mortality, west of Ruth Lake, Six Rivers National Forest.



Spotty older and more intense recent tanoak mortality on the central coast range north of Ukiah.

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